Notice of Allowability	Application No. 10/714,954	Applicant(s) NARITA ET AL.	
	Examiner Patricia L. Hailey	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *an amendment filed on March 11, 2005*.

2. ☒ The allowed claim(s) is/are *1-6*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Applicants' remarks and amendments, filed on March 11, 2005, have been carefully considered. Claims 7-12 have been canceled; no new claims have been added.

Claims 1-6 remain pending in this application.

Withdrawn Objections and Rejections

The objection to claims 11 and 12, as well as the 112(2) rejection of these claims, stated in the previous Office Action, have both been withdrawn in view of Applicants' cancellation of these claims.

The 102(b)/103(a) rejection of claims 7-12 as being anticipated by or, in the alternative, as being obvious over Harley et al. (U. S. Patent No. 5,041,406) stated in the previous Office Action, has been withdrawn in view of Applicants' cancellation of these claims.

Allowable Subject Matter

1. Claims 1-6 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or reasonably suggest the claimed process for producing a zinc chloride-loaded support, said zinc chloride being loaded

on a solid support, wherein a mixture of the solid support and zinc oxide is brought into contact with (1) water vapor containing a hydrogen chloride gas or (2) with a hydrogen chloride gas so that said zinc oxide is chemically converted into zinc chloride.

Harley et al. as discussed above teach a catalyst comprising zinc chloride on a non-alumina support, such as silica gel, but does not teach or suggest Applicants' claimed method. In Example I of Harley et al., silica is impregnated with a solution of zinc chloride and potassium chloride. See also col. 2, lines 55-66.

Petrosky et al. (U. S. Patent No. 4,922,043) teach a process for the preparation of methyl chloride by heating methanol and hydrogen chloride as a vapor mixture in contact with a catalyst comprising an aqueous solution of, most preferably, zinc chloride. See col. 3, lines 4-25 of Petrosky et al.

European Patent No. 1,421,992 has a publication date of May 26, 2004, which is later than Applicants' effective filing date.

Zielke (U. S. Patent Nos. 4,424,111 and 4,136,056) and Gorin (U. S. Patent No. 4,081,400) are both directed to processes for regenerating spent molten zinc chloride, wherein the zinc chloride is subjected to vapor phase oxidative treatment to produce effluent zinc chloride vapors containing entrained zinc oxide and zinc oxide complexes, and, after separating the zinc chloride vapors from the entrained solids, subjecting the entrained solids to vapor phase oxidative treatment by a mixture of air and hydrogen chloride gas to yield zinc chloride in vapor form, and to

recover the zinc chloride in a substantially solids-free molten state. See the claims of Zielke '111, '056, and Gorin.

von Girsewald et al. (U. S. Patent No. 1,743,740) teach a method for producing anhydrous zinc chloride by reacting zinc oxide with chlorine in the presence of hydrogen, or of hydrogen containing gas mixtures, such as mixtures of hydrogen and carbon monoxide (water gas). Although this reference teaches both hydrogen and chlorine gases, the reference does not teach or suggest the employment of hydrogen chloride, nor does the reference teach or suggest the presence of a support.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on November 18, 2003.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Hailey/plh
Examiner, Art Unit 1755
March 30, 2005

J.A. LORENGO
PRIMARY EXAMINER